

Model PMSA/PMHA

General Purpose Pressure Sensor

Description

PMSA/PMHA sensing element has excellent temperature properties by adopting a self temperature compensation gauge. A diaphragm and a pressure port are configured as one body for the prevention of leakage. It has superior durability for an instant over pressure.

Features

- ▶ Self temperature compensation foil strain gauge
- ▶ Measuring range 0~500MPa
- ▶ mVDC Output
- ▶ 0.25%FS(PMHA), 0.5%FS(PMSA) accuracy
- ▶ Stainless steel media-wetted materials

Applications

- ▶ Process control
- ▶ Hydraulics & Pneumatic
- ▶ Compressor Control
- ▶ Chillers
- ▶ Refrigeration Equipment

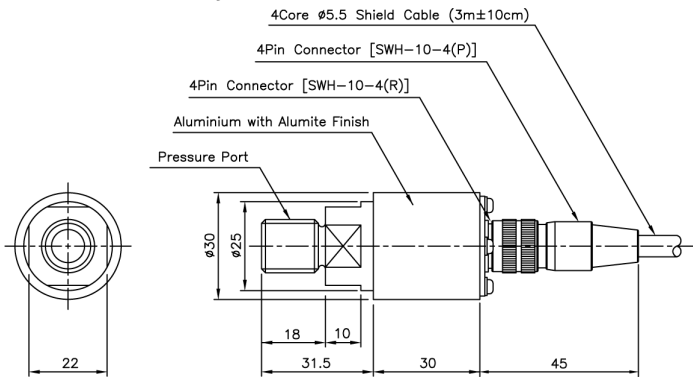
Specifications



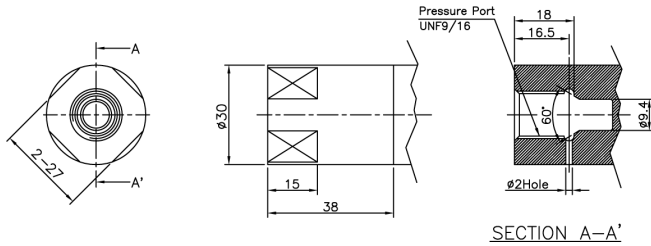
	PMSA	PMHA
Range	0~1, 2, 3, 5, 10, 20, 30, 35, 50, 100, 250, 400, 500MPa (Gauge) -0.1~0, 1, 2, 3, 5, 10, 20, 30, 35, 50, 100, 250, 400, 500MPa (Gauge)	
Performance		
Accuracy	±0.5%FS(RSS)	±0.25%FS(RSS)
Thermal Effect on Zero	±0.05%FS/°C	±0.02%FS/°C
Thermal Effect on Span	±0.05%FS/°C	±0.02%FS/°C
Compensated Temperature Range	-10 ~ 70°C	-20 ~ 80°C
Operating Temperature Range	-20 ~ 80°C	-30 ~ 100°C(Optional -30~120°C)
Electrical		
Excitation	12VDC Max.	
Sensitivity	1.5mV/V (1.0mV/V : 1MPa, 400MPa)	
Input Impedance	350Ω(nominal)	380Ω(nominal)
Output Impedance	350Ω(nominal)	
Insulation Resistance	5MΩ @50VDC Min.	
Electrical Connection	Connector, Cable	
Physical		
Proof Pressure	150%FS Max.(≤100MPa), 120%FS Max.(>100MPa)	
Burst Pressure	200%FS Min.(≤100MPa), 130%FS Min.(>100MPa)	
Vibration	49.1m/s ² {5G}, 10~500Hz	
Shock	981m/s ² {100G}	
Pressure port	R(PT)3/8"(≤100MPa), UNF9/16"Female(>100MPa)	
Media-Wetted Materials	Stainless Steel 630	
Weight	Approx. 100g (Sensor Only)	

Dimension

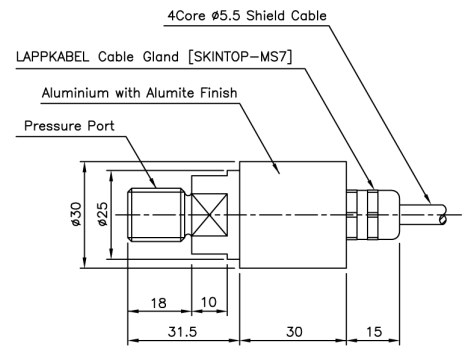
► Connector Type



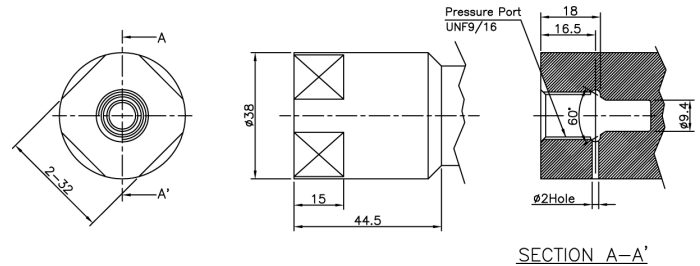
► Port of 250MPa Type



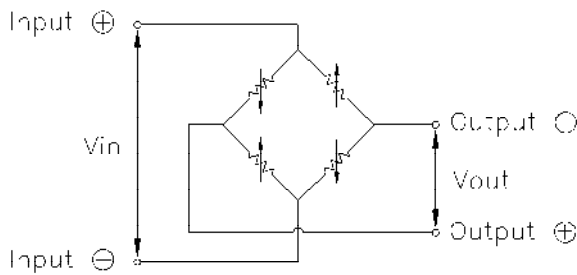
► Cable Gland Type



► Port of >400MPa Type



Internal Circuit Diagram



External Connections

Connector Pin No.	Wire Color	Connections
1	Red	Input ⊕
2	White	Output ⊖
3	Black	Input ⊖
4	Green	Output ⊕
5	Shield	Earth

Ordering Information

PMSA 0001 M A P A

Model Name

PMSA : Accuracy 0.5%FS
PMHA : Accuracy 0.25%FS

Pressure Range

XXXX : Pressure
CXXX : Compound Pressure

Option

A : Normal
B : Temperature Range -30~120°C

Connecting Methods

P : Connector
S : Cable Gland

Pressure port

A : R(PT)3/8"
K : UNF9/16"(Female)

Pressure Unit

M : MPa B : bar
K : kgf/cm² P : psi

Sensys

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· Specifications are subject to change without notice.